

CLAIMS

Claims 1-4 (Cancelled)

5. (new) A lock comprising:

- a lock casing having a slot;
- a lock bolt movable along the length of the slot;
- a guide adjacent to the lock bolt, vertically movable relative to the casing;
- a locking slide horizontally movable between engaging the guide and disengaging the guide, wherein engaging the guide precludes vertical movement of the guide;
- a bolt retainer engaging the bolt, the guide, and the locking slide, wherein vertical movement of the bolt results in horizontal movement of the bolt retainer and disengagement between the locking slide and guide allowing the bolt to be moved to a fully opened position.

6. (new) The lock in claim 5 further comprising:

- a plug extension wherein rotation of the plug extension engages the extension with the locking slide causing the locking slide to disengage the guide.

7. (new) The lock in claim 5 further comprising:

- a tumbler dial,
- a key cylinder capable of accepting a key, the key cylinder mounted in the tumbler dial and offset from the center of the tumbler dial,
- a dial cam attached to the key cylinder wherein insertion of the key into the key cylinder and rotation of the key, couples the dial cam with the plug extension such that further rotation of the tumbler dial rotates the plug extension.

8. (new) The lock in claim 5 further comprising:

a plurality of tumblers positioned within the casing, each of the plurality of tumblers having a radial indentation;

a protrusion on the bolt retainer, the protrusion capable of fitting into the radial indentation of each of the plurality of tumblers, wherein the movement of the protrusion into the indentation of each of the plurality of tumblers disengages the locking slide from the guide.

9. (new) A lock comprising:

a lock casing having a slot;

a lock bolt extensible and retractable relative to the casing through the slot;

a cam plate horizontally movable within the casing and engaging the bolt,

a plug extension cam wherein rotation of the plug extension cam engages the cam with the cam plate causing the cam plate and bolt to move horizontally to an open position.

10. (new) The lock in claim 9 further comprising:

a tumbler dial,

a key cylinder capable of accepting a key, the key cylinder mounted in the tumbler dial and offset from the center of the tumbler dial,

a dial cam attached to the key cylinder wherein insertion of the key into the key cylinder and rotation of the key, couples the dial cam with the plug extension cam such that further rotation of the tumbler dial rotates the plug extension cam.

11. (new) A lock comprising:

a lock casing having a slot;

a lock bolt extensible and retractable relative to the casing through the slot;

a cam plate horizontally movable within the casing and engaging the bolt,

a plug extension cam wherein rotation of the plug extension cam engages the cam with the cam plate causing the cam plate and bolt to move horizontally to an open position.

12. (new) A lock comprising:

a tumbler dial,

a number dial coupled to the tumbler dial,

a key cylinder mounted in the tumbler dial, the key cylinder capable of receiving a key, wherein inserting into the key cylinder and rotating a key will decouple the number dial from the tumbler dial and rotating the key back to its original position will re-couple the tumbler dial from the number dial.

13. (new) The lock in claim 12 wherein the key cylinder is mounted in the tumbler dial offset from the center of the tumbler dial.

14. (new) The lock in claim 12 further comprising

a ball bearing,

a ball bearing opening located on the tumbler dial,

a plurality of grooves located on the number dial,

wherein the number dial and tumbler dial are couple together by the ball bearing, the ball bearing engaging the tumbler dial at the ball bearing opening and engaging the number dial at one of the plurality of grooves.

15 (new) The lock in claim 12 further comprising a dial cam attached to the key cylinder including a dial cam pocket wherein inserting the key into the key cylinder and rotating the key brings the dial cam pocket adjacent to the ball bearing resulting in the number dial decoupling from the tumbler dial.

16. (new) The lock of claim 12 further comprising a marking that indicates relative position between the tumbler dial and the number dial.

17. (new) A lock comprising:

a dial having an axis of rotation,

a key cylinder mounted in the dial,

wherein the key cylinder is offset from the axis of rotation of the combination dial.

18. (new) A lock comprising:

a bolt,

a plate engaging the bolt,

a dial assembly indirectly coupled to the plate wherein rotation of the dial assembly moves the plate and bolt to an open position,

at least one spring biasing the bolt, the spring positioned to return the bolt to an extended position,

a key cylinder capable of accepting a key, the key cylinder mounted in the tumbler dial and offset from the center of the tumbler dial,

a dial cam attached to the key cylinder wherein insertion of the key into the key cylinder and rotation of the key, couples the dial cam with the locking mechanism of the lock such that further rotation of the tumbler dial unlocks the lock.

19. (new) A method of changing the combination of a lock said method comprising the step of:

inserting a key into a key cylinder of the lock;

rotating said key;

rotating a number dial relative to a tumbler dial;

turning the key back to the locked position

wherein the lock remains locked while the combination is changed.

20. (new) The method set forth in claim 19 wherein the step of rotating the key further comprising decoupling the number dial from the tumbler dial.

21. (new) The method set forth in claim 19 wherein the key cylinder is mounted in a tumbler dial offset from the rotational center of the tumbler dial.

22. (new) The method set forth in claim 19 wherein at least ten combination changes are available.

23. (new) The method as set forth in claim 19 further comprising the step of aligning a marking with a number on said number dial, wherein said number correlates to a combination to unlock the lock.

24. (new) A locker lock comprising:

a lock housing; and

a bolt that acts as a deadbolt when in a locked position, and acts as a spring bolt in the unlocked position.

25. (new) The locker lock of claim 20 further comprising a paw plate and an upsetter, wherein when said bolt moves and said paw plate does not move, the upsetter engages a tumbler and rotates the tumbler from the locked position.